REMARKS

Claims 20-62 currently appear in this application. The Office Action of August 2, 2006, has been carefully studied. These claims define novel and unobvious subject matter under Sections 102 and 103 of 35 U.S.C., and therefore should be allowed. Applicant respectfully requests favorable reconsideration, entry of the present amendment, and formal allowance of the claims.

Allowed Claims

It is noted with appreciation that claims 20, 22, 23, 26, 28, 29, 32, 34, 35, 38, 40, 41, 44, 46 and 48 are allowed.

Election/Restriction

It is noted that the restriction requirement among the inventions has been reconsidered, and that the restriction requirement is withdrawn with respect to Groups I-XV.

Sequence Compliance

Applicants have added into the present specification a new paper copy Sequence Listing section according to 37 C.F.R. §1.821(c) as new pages 1-8. Furthermore, attached hereto is a file (either on a CD-R disk or in an online text and file) containing the "Sequence Listing" in computer readable form in accordance with 37 C.F.R. §1.821(e).

The following statement is provided to meet the requirements of 37 C.F.R. §1.821(f) and 1.821(g).

I hereby state, in accordance with 37 C.F.R. §1.821(f), that the content of the attached paper and computer readable copies of the sequence listing are believed to be the same.

I hereby also state, in accordance with 37 C.F.R. §1.821(g), that the submission is not believed to include new matter.

Applicants submit that the present application contains patentable subject matter and therefore urge the examiner to pass the case to issuance.

Rejections under 35 U.S.C. 112

Claims 21, 24, 25, 27, 30, 31, 33, 36, 37, 39, 42, 43, 45 and 47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner alleges that the 3'-end of the nucleotide residue is inverted in the binding domain contiguous with the 3'-end of the catalytic domain, because a 3'-end of a catalytic molecule will only be contiguous with a 5'-end of a nucleotide strand with which it is associated.

This rejection is respectfully traversed. The claims recite that the 3′-end nucleotide is inverted in the DNAzyme binding domain that is located 3′ to the catalytic domain. That is, the inverted 3′ nucleotide is located in the binding domain contiguous with the 3′-end of the catalytic domain.

Claims 49-58 are rejected under 35 U.S.C. 112, first paragraph, because the specification is said to be enabled only for DNAzyme-mediated inhibition of EGR-1 expression *in vitro*.

This rejection is respectfully traversed. It is not understood on what authority the Examiner relies in asserting that "issues that give rise to unpredictability [in the art] that apply to antisense oligonucleotides also apply to the use of DNAzymes."

Attention is directed to Example 1 on page 24, lines 3-23; and page 28, line 29 to page, line 3, describing an investigation of the effect of the ED5 DNAzyme on neointima formation in a rat model was investigated. Initimal thickening 18 days following ligation of the carotid artery was inhibited 50% by ED5 compared to the controls (ED5SCR and vehicle only, Figure 4). Further, Example 6 on page 31 discloses DNAzyme delivery to cells within the porcine artery wall *via* an interluminal catheter, where the DNAzyme localized

within intimal cells of the vessel wall as evidenced by FITC label. Porcine angioplasty and stenting are accepted models of human in-stent restenosis, because the porcine coronary anatomy, dimensions and histological response to stenting are similar to humans (Karas et all, 1992; Muller et al., 1992; page 31, lines 5-8). Copies of abstracts of these two articles are submitted herewith. Taken together, these data clearly show that DNAzymes may be successfully administered *in vivo* with the desired therapeutic result.

In view of the above, it is respectfully submitted that the claims are now in condition for allowance, and favorable action thereon is earnestly solicited.

Respectfully submitted,

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